



Turtle Beach Montego A3DXstream

64 Voice PCI Accelerator



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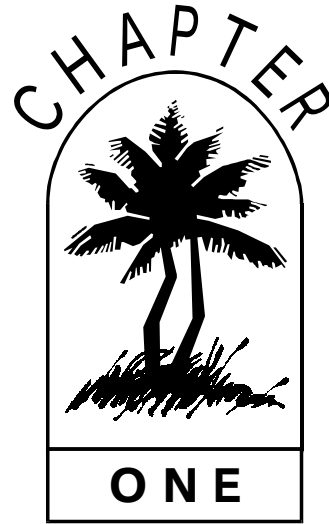


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WELCOME...

And thank you for purchasing the Montego A3DXstream.™

Turtle Beach continues to bring you the best value in PC sound quality and performance with the Montego A3DXstream.

With advanced features such as high-speed bus-mastering scatter-gather PCI audio interface, DirectSound acceleration, 64 voice wavetable synthesis, Aureal 3D positional audio for realistic gaming effects, and hardware based full-duplex record/playback at full bandwidth, Montego maximizes your multimedia experience by delivering state-of-the art audio performance.

Montego is the affordable way to upgrade PC performance in Windows. Which is just what you'd expect from the leaders in award-winning PC sound technology.



REMEMBER TO REGISTER!

You can register by mail, fax, phone or on the Web — whichever is easiest for you. Refer to the front of this manual or the Registration Card for these addresses.

There are many benefits to registering your Montego A3DXstream. In addition to the warranty, you also will receive:

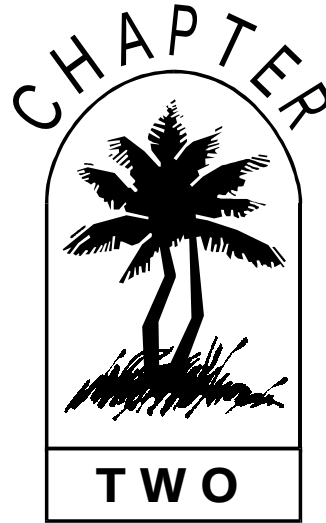
- ◆ Update Notifications — to keep you informed of software updates and new Voyetra/Turtle Beach products.
- ◆ Upgrade Plan — to provide you with discounts on our full-featured PC sound products.
- ◆ Technical Support — to help you get your hardware and software installed before you register. However, you must be a registered user to receive full technical support.

OUR WEBSITE

Be sure to visit the Turtle Beach website for the latest information on new products, upgrades and to obtain the most recent drivers. You will find us at www.tbeach.com.



Click the Turtle Beach website icon, in the TBS Montego A3DXstream program group, for direct access to our website.



INTRODUCING THE MONTEGO A3DXSTREAM

The Montego has many significant features, including:

- ♦ High-resolution 18-bit converters
 - ♦ Greater than 92dB signal to noise ratio
 - ♦ Aureal 3D Positional Sound in Windows 95 and 98
 - ♦ DirectSound™ acceleration in Windows 95 and 98
 - ♦ Full-duplex hardware for simultaneous 16-bit stereo record/playback
 - ♦ 64 voice wavetable synthesis (not available in Win 3.11)
-



RESOURCE USAGE

The Montego A3DXstream, like all plug-in cards, requires certain computer resources in order to operate. These resources are associated with specific board functions.

- ◆ **In Windows 3.x**, the resources are configured automatically by your BIOS, but can be overwritten by the user.
- ◆ **In Windows 95**, the resources are set automatically by the Configuration Manager, but can be adjusted using the Windows Device Manager.
- ◆ **In Windows NT**, the resources are configured automatically.

THE REQUIRED RESOURCES ARE AS FOLLOWS:

- ◆ Two IRQs
- ◆ Several I/O address ranges
- ◆ Two DMAs

SYSTEM REQUIREMENTS

Computer	IBM PC or compatible with one available PCI slot.
Processor	Pentium 75 MHz or higher
RAM	16 MB
Hard Drive	approximately 12 MB free space for drivers and applications; data files require additional space
Operating System	Windows® 3.1 Windows® 95, 98 Windows® NT 4.0
CD-ROM Drive	A CD-ROM drive is needed for the software and driver installations

High-quality stereo sound system, powered speakers or headphones to properly hear Montego's high-quality audio playback. The requirements listed are for the Aureal 3D Positional Sound in Windows 95 and 98.

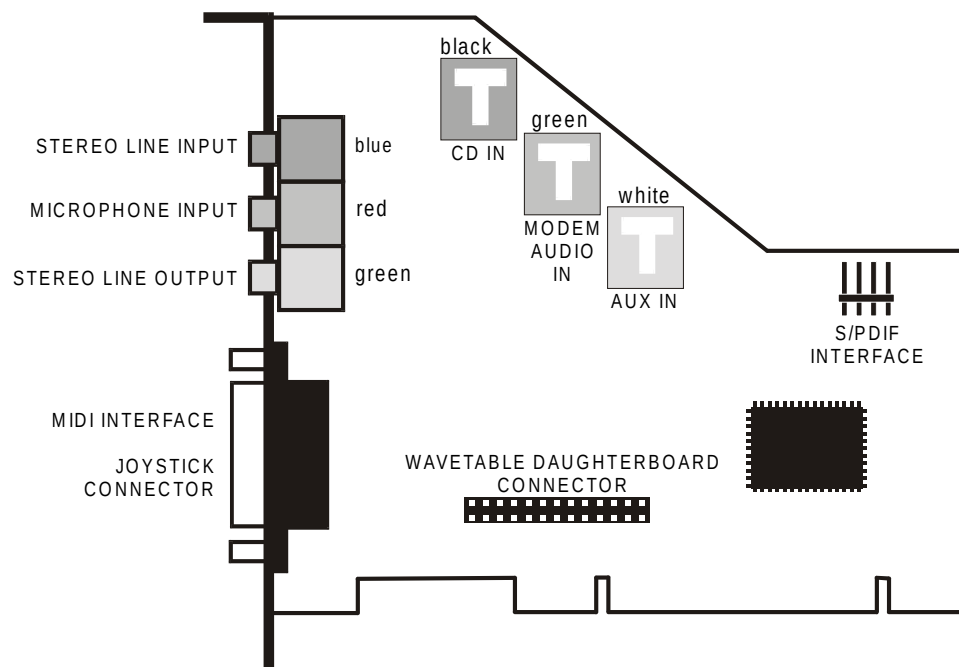
SPEAKERS VS. HEADPHONES

The Montego A3DXstream is capable of producing 3D sound through both speakers and headphones. When using speakers, your left ear hears the sound coming from the left speaker but also some of the sound coming from the right speaker. The same holds true for your right ear, it also hears sounds coming from the left speaker.

To achieve the maximum 3D effect the use of headphones is recommended. When using headphones the sound coming from the left are only heard by your left ear just as the sounds coming from the right are only heard by your right ear. This results in a much more immersive experience.

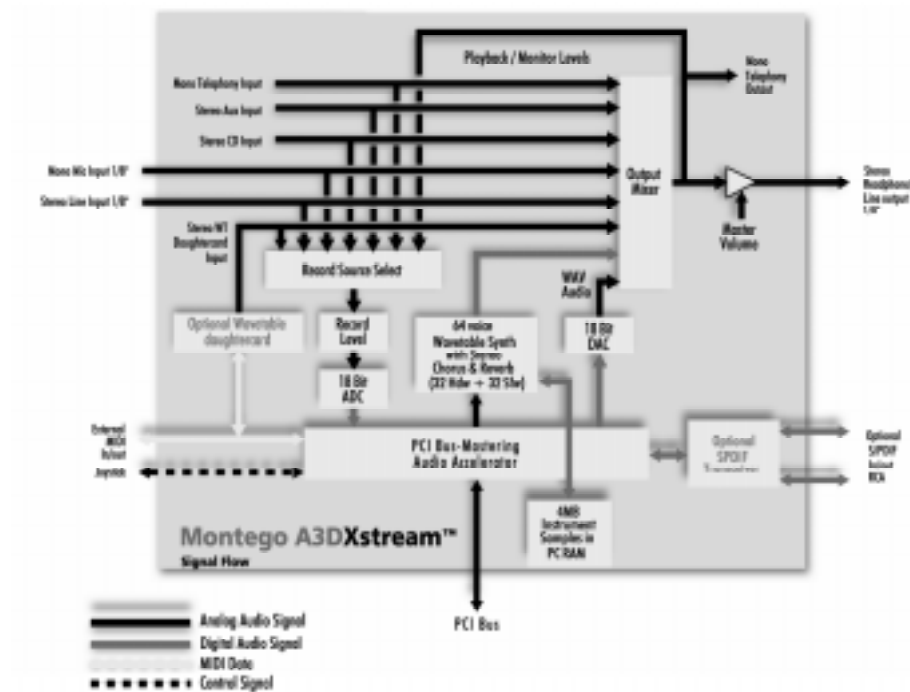
THE MONTEGO A3DXSTREAM SOUND CARD

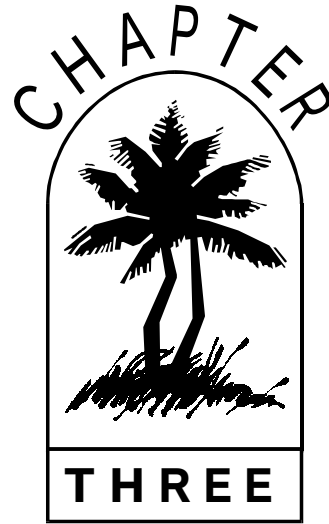
Here is a look at the Montego sound card, to help you identify the various connectors and ports.





SIGNAL FLOW DIAGRAM





INSTALLING THE MONTEGO A3DXSTREAM

It is time to install the Montego A3DXstream sound card. This chapter takes you through the process step-by-step.

If you have another sound card in your system that you are replacing with the Montego, remove that sound card's drivers from your system, remove that sound card, then reboot the system to make certain no errors occur and no old sound card drivers remain. For information on removing the sound card and its drivers, refer to the appropriate documentation.

Before you physically install the Montego A3DXstream, it is very important that you have enough resources available — port and memory addresses and IRQs.



OVERVIEW OF THE STEPS

There is a specific sequence of steps that you need to take when installing the Montego sound card.

HERE IS AN OVERVIEW OF THE STEPS:

1. Remove old sound card and drivers (optional.)
2. Install the Montego sound card in the computer.
3. Attach the audio cable to the CD-ROM drive (optional.)
4. Install the Montego A3DXstream drivers and software.
5. Setting the Montego to be the default audio device if there are two sounds cards in your system.

PRODUCT ID NUMBER



To install the software, you will need the Product ID number. This number is located on the Registration Card that came with the software. We recommend that you write the Product ID Number on the first page of this manual, so you will have it handy should you need to phone for Tech Support.

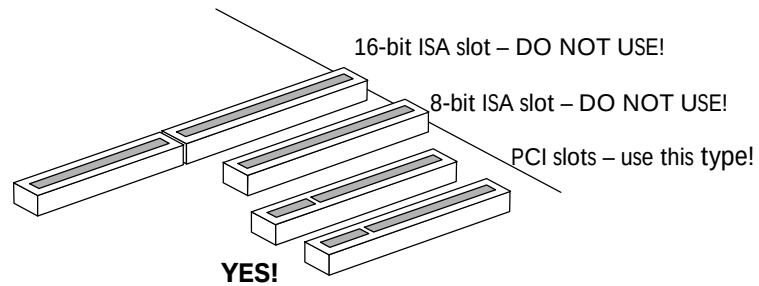
INSTALLING THE BOARD

It is time to install the Montego sound card in your system!

1. Turn off your PC and any connected peripherals and unplug the system.
2. Remove the mounting screws from your computer's cover. Remove the cover.

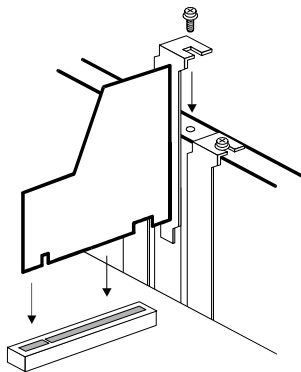
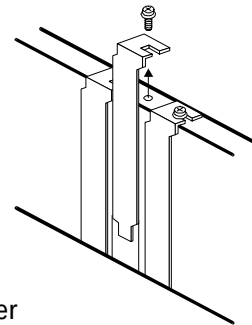


3. Select an unused PCI expansion slot for the card. For best results, choose a slot that is not immediately next to another board, since some boards emit signals that can interfere with the Montego. Also, position the Montego card as far as possible away from the video card and power supply!



4. Remove the selected expansion slot cover by unscrewing its securing screw.

Save the screw to secure the Montego to the chassis later.

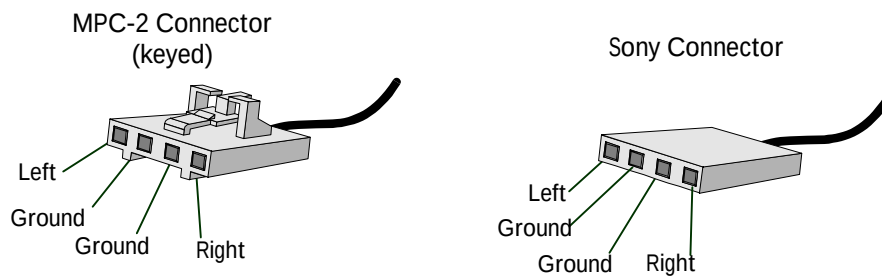


5. Align the card's gold-striped edge connector with the selected PCI expansion slot socket. With a gentle back-and-forth rocking motion, press the Montego firmly into the slot until it snaps in place.
6. Secure the Montego sound card to the chassis with the expansion slot cover screw you removed earlier.

INSTALLING THE CD-ROM AUDIO CABLE

The Montego comes with an audio connector cable — one end is keyed (MPC-2), the other is not (Sony). All CD-ROM drives that adhere to the MPC-2 (Multimedia PC) standard have an MPC-2 jack.

Connect the MPC-2 connector to your CD-ROM drive. Then attach the Sony connector to the Montego.

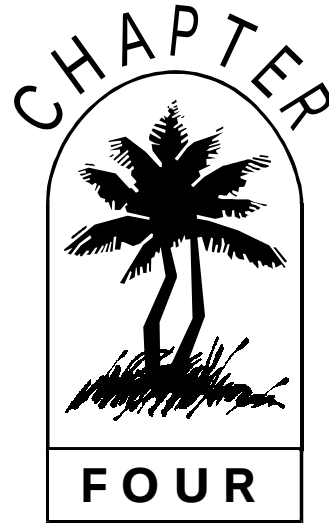


When connecting the CD-ROM audio cable, note that:

- ◆ The audio cable should be plugged into the CD-ROM drive first; then the other end of the interface should be plugged into the appropriate connector on the Montego sound card. Make sure that you are plugging the audio connector into the 4-pin header labeled “CD IN.”
- ◆ On the cable, “white” is “left” and “red” is “right.”
- ◆ When connecting the cable to the Montego, the red wire should be on the right (white should be closest to the slot cover.)
- ◆ Now You Are Ready to Install the Drivers!

PROCEED TO THE CHAPTER THAT APPLIES TO YOUR SYSTEM:

- ◆ Windows 95 Installation
 - ◆ Windows 3.x Installation
 - ◆ Windows NT 4.0 Installation
-



WINDOWS 95 INSTALLATION

Now that the hardware is installed, it is time to configure the drivers. Plug and Play uses your system's BIOS and the Plug and Play features of Windows 95 to allocate resources for the Montego.

WHICH VERSION OF WINDOWS 95 DO YOU HAVE?

Microsoft issued a maintenance release of Windows 95 referred to as OSR2. This version shipped as the stock operating system on many PCs. If you have this version of Windows 95 then the installation will be slightly different than described below. However, the installation will go smoothly if you simply follow the on screen instructions and in all cases where the system is looking for a file just browse to the root of the Montego CD.



BEFORE YOU INSTALL THE DRIVERS, NOTE...

- ♦ The Montego A3DXstream sound card must be installed in your system. If you have not already installed the sound card in your PC, refer to the previous chapter for instructions.
- ♦ **IMPORTANT** On the first boot up after physically installing the Montego A3DXstream, place the Montego Applications CD in your CD-ROM drive **before** Windows completes boot up.

TO INSTALL THE DRIVERS IN WINDOWS 95:

1. Turn on the computer and place the Montego Applications CD in your CD-ROM drive if you did not already.

When the New Hardware Found dialog box reports that it sees the Turtle Beach

Montego sound card, select **Driver from disk provided by hardware manufacturer**. Then click **OK**.



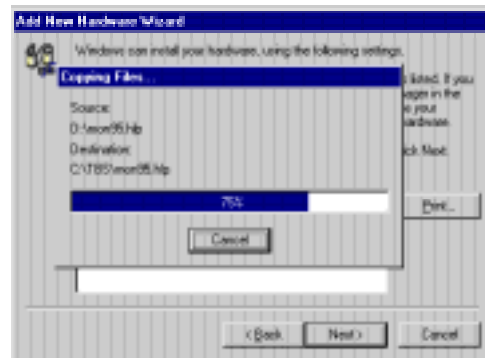
2. When the Install from Disk dialog box displays enter the letter of your CD-ROM drive, or click on Browse and locate your CD-ROM drive. Click **OK**.





At this point, the install program will check for Direct X 5 or later. If Direct X is not installed it will automatically be installed. If Direct X 5 or later is already on your system installation will proceed. If Direct X needed to be installed then you will be prompted to reboot. After rebooting installation will continue.

3. Windows then copies the files from the CD. You may be prompted to insert your Microsoft Windows 95 CD or floppies, as the core sound components of the operating system may need to be copied as well. These include the audio codecs, the Mixer and the Sound Recorder program.



The files are located in the **WIN95** directory on your Windows 95 CD-ROM.

If you do not have your Microsoft Windows 95 installation CD or floppies available, you can choose **Skip File** for each of the Windows 95 Sound Options and install them later from the Windows 95 Control Panel, **although this is not recommended**.

4. The Installation will continue, follow the on-screen instructions to complete the install. **Note that the product ID can be found on you're your registration card.**

At this point, the drivers should be installed and the Montego sound card should be functional. We recommend that you run the Testing and Troubleshooting diagnostic located in the TBS Montego program folder to test your system or troubleshoot any conflicts you might have.

To test the system, you need to hook up headphones or speakers to the Montego's output. For more information on hooking up speakers to the Montego, refer to the "Making Connections" chapter later in this Guide.



SETTING THE MONTEGO AS THE DEFAULT AUDIO DEVICE

If you have more than one sound card in your system you will need to set the Montego as the default audio device.

SETTING THE MONTEGO TO BE THE DEFAULT AUDIO AND MIDI DEVICE:

1. In the Windows 95 Control Panel double-click the Multimedia icon.
2. Click on the Audio tab. TBS Montego Playback should be chosen for Playback and TBS Montego Record should be chosen for Recording.
3. Now click on the MIDI tab.
4. The TBS Montego Wavetable MIDI should be selected.
5. Click on OK to save any changes.

TESTING AND TROUBLESHOOTING

If the Montego or your system is not working properly, there is probably a resource conflict in your system. This means that two or more devices in the system are using the same resources. Resource conflicts are fairly typical and are a normal part of the PC hardware installation process — and they are easily resolved.

There are several possible types of conflicts that users experience when installing the Montego:

- ◆ Input/Output Port Address Conflict
 - ◆ Interrupt (IRQ) Conflict
 - ◆ DMA Conflict
-

Troubleshooting your system involves checking the current settings for each of these common conflicts and trying new settings for the resources that conflict. Note that you may need to try a number of different resource configurations before all of the peripherals work together in your PC.

TESTING AND TROUBLESHOOTING DIAGNOSTIC UTILITY

The Testing and Troubleshooting diagnostic provides an easy way to find and fix audio problems in your system. If you experience any problems installing the drivers, we recommend you run this diagnostic utility.

In some rare cases, after installing the Montego sound card, you may not be able to reboot your system. If you are unable to boot into Windows 95, you can restart in Safe Mode.

TO BOOT IN SAFE MODE:

1. **Restart** the system again.
2. When you see the message “Starting Windows 95...” press the **F8** key.
3. Select **Safe Mode** from the menu.

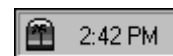
Now run the Testing and Troubleshooting file to help diagnose the problem.

UNINSTALLING THE MONTEGO A3DXSTREAM

Uninstalling the Montego A3DXstream is a two step process. First the applications must be removed, and then the drivers. Before Uninstalling be sure to close the Turtle Beach System Tray Launcher.

TO CLOSE THE TURTLE BEACH SYSTEM TRAY LAUNCHER:

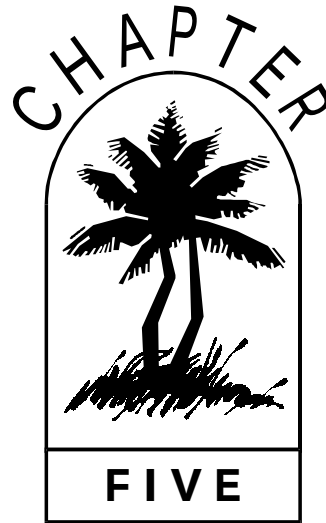
1. Right-click on the Turtle Beach System Tray Launcher icon and choose Remove Tray





TO UNINSTALL THE APPLICATIONS AND DRIVERS:

1. From the Windows Control Panel double-click the System icon.
 2. Click the Device Manager tab.
 3. Double-click on Multi-function adapters.
 4. Select TBS Montego Multifunction PCI Platform and click Remove. A dialog will display asking confirmation, Click Ok.
 5. From the Windows Control Panel double-click the Add/Remove Programs icon.
 6. Select TBS Montego Applications from the list and click the Add/Remove button..
 7. Select TBS Montego Drivers from the list and click the Add/Remove button..
-



WINDOWS 3.X INSTALLATION

BEFORE YOU INSTALL THE DRIVERS, NOTE...

- ♦ The Montego A3DXstream sound card must be installed in your system. If you have not already installed the sound card in your PC, refer to the Installing the Montego A3DXstream chapter for instructions.
 - ♦ If installing the Montego A3DXstream in a system without Windows (DOS only) follow the directions in README.TXT in the MS_DOS directory on the Applications CD.
 - ♦ That your BIOS is in non Plug-and-Play mode. For instructions on changing your BIOS, refer to your motherboard's manual.
-



TO INSTALL THE MONTEGO IN WINDOWS 3.X:

1. Start Windows 3.x and make sure the Program Manager is open.
2. Place the Montego's Installation CD in your CD-ROM drive.
3. Choose **Run** from the Program Manager's File menu.

In the Run dialog box, type the letter name of the drive followed by **\setup**. If your CD drive is d:\, type **d: \setup**.

4. Click **OK**. The Welcome screen displays.
5. Follow the on-screen instructions to install drivers and applications. Note that the product ID can be found on your registration card. During the installation windows will display a configuration screen allowing you to change the hardware settings. It is recommended that you use the default settings.

In order to test the system, you need to hook up headphones or speakers to the Montego's output. For more information on hooking up speakers to the Montego, refer to the "Making Connections" chapter later in this Guide.

TESTING AND TROUBLESHOOTING

If the Montego sound card or your system is not working properly, there is probably a resource conflict in your system. This means that two or more devices in the system are using the same resources. Resource conflicts are fairly typical and are a normal part of the PC hardware installation process — and they are easily resolved. Follow the instructions on the next page to change the settings of your card.

There are three possible types of conflicts that users experience when installing the Montego:

- ◆ Input/Output Port Address Conflict
- ◆ Interrupt (IRQ) Conflict
- ◆ DMA Conflict

Troubleshooting your system involves checking the current settings for each of these common conflicts and trying new settings for the resources that conflict. Note that you may need to try a number of different resource configurations before all the peripherals work together in your PC.

TO CHANGE THE RESOURCE SETTINGS:

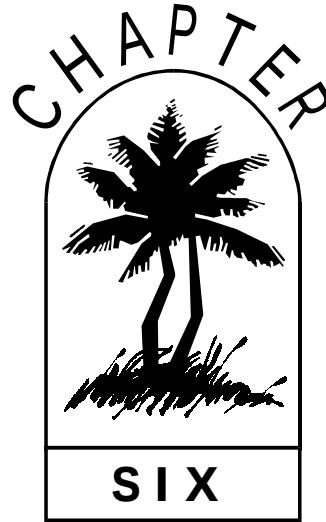
1. From the Windows Control Panel double-click the TBS Montego Config icon.
2. A dialog box will display with the current settings listed. Click on the Legacy tab.
3. Click on the up and down arrows to change a setting.
4. Click Ok.

UNINSTALLING THE MONTEGO A3DXSTREAM

To uninstall the Montego A3DXstream applications and driver double-click the Remove TBS Montego icon in the TBS Montego program group and follow the onscreen instructions.



TURTLE BEACH SYSTEMS



WINDOWS NT 4.0 INSTALL

BEFORE YOU INSTALL THE DRIVERS, NOTE ...

- ♦ The sound card must be installed in your system. If you have not already installed the sound card in your PC, refer to the “Installing the Montego A3DXstream” chapter for instructions.
 - ♦ That your BIOS is in non Plug-and-Play mode. For instructions on changing your BIOS, refer to your motherboard’s manual.
 - ♦ All other applications have been closed down. This is very important.
-



INSTALLING THE MONTEGO DRIVERS IN WINDOWS NT 4.0

To install the Montego drivers in Window NT 4.0, run D:\SETUP.EXE (assuming D: is the letter of you CD-ROM drive.)

Setup will install the applications, then step you through the driver installation. The same driver installation process that setup will step you through is listed below for your convenience.

TO INSTALL A JOYSTICK DRIVER:

1. From the Windows NT Control Panel double-click the Multimedia icon.
2. Select the Devices tab.
3. Click the Add button and choose Unlisted or Updated driver.
4. The Install Driver dialog box appears and requests the location of the driver files.
5. Navigate to the /drvlib/multimed/joystick/x86 directory, select the Microsoft Analog Joystick driver and click OK.
6. After installing the joystick drivers Restart your system and continue the installation.

TO INSTALL THE MONTEGO DRIVERS:

1. From the Windows NT Control Panel double-click the Multimedia icon.
 2. Click the Devices tab.
 3. Click the Add button.
 4. Select unlisted or updated driver. Click OK.
 5. A dialog box appears and requests the path of the Montego drivers to be installed. The drivers are located on the root of the Montego CD-ROM. Type in the letter of your CD-ROM drive if it's not already there and click OK. (Example, D:)
 6. Select the Turtle Beach Montego driver in the dialog box. Click OK.
-

7. Windows NT may report that the file AU88NT32.DLL is already present on your system. Install the file provided with the Turtle Beach Montego by clicking the New button. This will insure you have the newest driver.
8. A dialog box, titled TBS Montego PCI Audio, should now appear. From here you can choose to enable or disable a joystick. If you wish to enable a joystick click on the Enable Joystick box. It is recommended that you use the default address settings. If you find that you are experiencing problems, follow the instructions in this help file to install the Montego drivers again and choose a different address.
9. Windows NT may display a dialog box asking you to restart your system. Click OK to restart your system. The Montego drivers should now be installed and working correctly.

SETTING THE MONTEGO AS THE DEFAULT AUDIO DEVICE

If you have more than one sound card in your system you will need to set the Montego as the default audio device.

SETTING THE MONTEGO TO BE THE DEFAULT AUDIO AND MIDI DEVICE:

1. From the Windows NT Control Panel double-click the Multimedia icon.
2. Click on the Audio tab. TBS Montego Playback should be chosen for Playback and TBS Montego Record should be chosen for Recording.
3. Now click on the MIDI tab.
4. The TBS Montego Wavetable MIDI should be selected.
5. Click on OK to save any changes.



TROUBLESHOOTING

The Montego PCI is assigned an IRQ by the BIOS. If you are having an IRQ conflict, you will need to go into your BIOS setup to select which IRQ is assigned to the slot in which you installed your Montego PCI. Please see your motherboard manufacturer's documentation.

TO CHECK THE RESOURCE SETTINGS FOR YOUR MONTEGO AND OTHER DEVICES:

1. Click on Start, then go to Programs -> Administrative Tools -> Windows NT Diagnostics.
2. Click on the resources tab. This will display a list of all the devices and resources that they use.

TO DISABLE OR ENABLE A DEVICE:

1. In the Windows NT Control Panel double-click on the Devices icon.
2. From here you can disable or enable individual devices. This can be helpful when troubleshooting conflicting devices.

For more information regarding devices and resource settings please see your Windows NT manual.

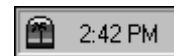


UNINSTALLING THE MONTEGO A3DXSTREAM

Uninstalling the Montego A3DXstream is a two step process. First the applications must be removed, and then the drivers. Before Uninstalling be sure to remove the Turtle Beach System Tray Launcher.

TO CLOSE THE TURTLE BEACH SYSTEM TRAY LAUNCHER:

1. Right-click on the Turtle Beach System Tray Launcher icon and choose Remove Tray



TO UNINSTALL THE APPLICATIONS

1. From the Windows NT Control Panel double-click the Add/Remove Programs icon.
2. Select TBS Montego Applications from the list and click the Add/Remove button..

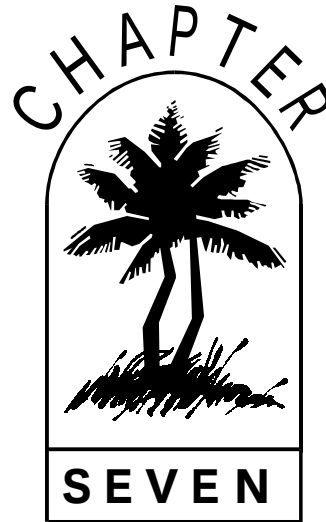
TO UNINSTALL THE DRIVERS

1. From the Windows NT Control double-click the Multimedia icon.
 2. Click the Devices tab.
 3. Select the TBS Montego Audio driver and click the Remove button.
-



TURTLE BEACH SYSTEMS

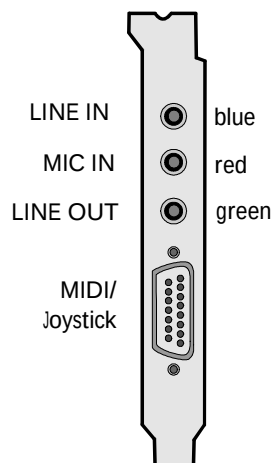




MAKING CONNECTIONS

THE BACK PANEL

The back panel of the Montego has Microphone input, Line input, Line output and MIDI/ Joystick connectors. These enable you to connect audio input and output devices to your PC.



The diagram on the left shows the connectors on Montego's back panel.

Line In , Mic In and Line Out on the back of Montego are audio ports requiring 1/8-inch mini-jack external connectors.

S/PDIF OUT is a digital connector, requiring an RCA connection to a DAT machine or other digital input.

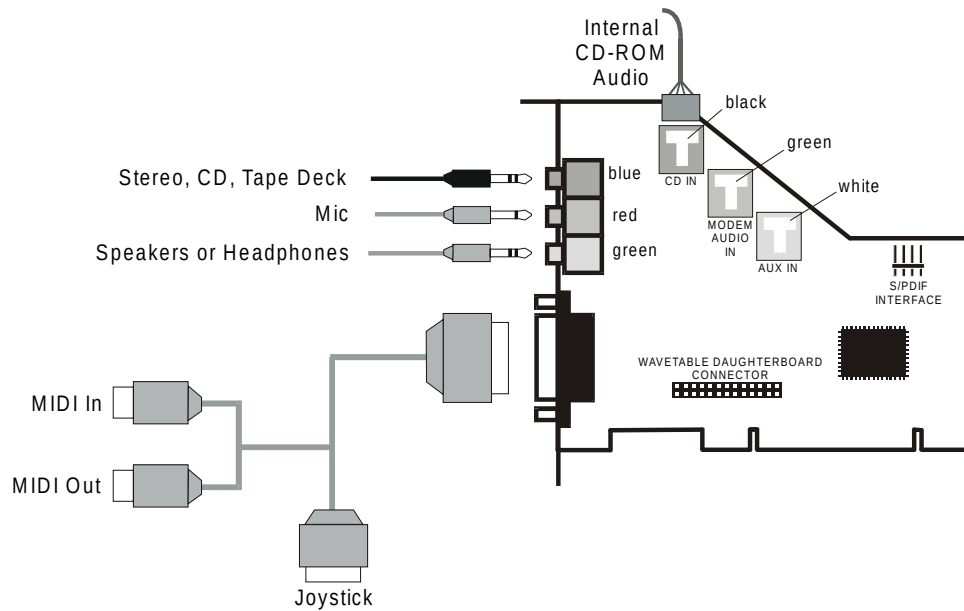
There are several different ways to connect equipment to the Montego:

Mic In— connects a microphone directly for recording your voice, acoustic instrument or acoustic sound source.



Line Input — connects line level audio sources such as a mixer, tape deck, CD player, etc.

Line Output — to monitor the output of the Montego, connect to powered speakers, connect to a separate power amp/speaker system or connect headphones directly.

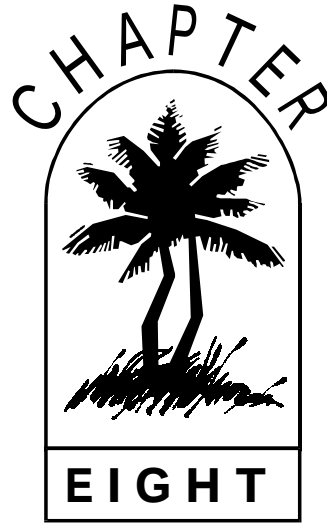


JOYSTICK CONTROLLER

If you want to connect a joystick to the Montego, the sound card and its drivers must be properly installed in your system.

PORT ADDRESSES

The Montego's joystick controller uses ports 201-201.



THE TBS MONTEGO CONTROL PANEL

The TBS Montego Control Panel allows you to configure the features of your Montego A3DXstream. It lets you easily adjust wavetable settings, A3D settings and offers access to the A3D demos. The Montego control Panel is slightly different in Windows 3.1, Window 95 and Windows NT so be sure to reference the proper section. Note that A3D sound is currently only supported in Windows 95 and 98.



WINDOWS 95 TBS MONTEGO CONTROL PANEL

MIDI TAB

DESTINATION FOR DOS BOX MIDI OUT

This list box lets you select how MIDI is handled by programs running in DOS boxes. There are two options.

- ◆ **Montego MPU-401** - This setting sends MIDI data to an external synthesizer attached to the MIDI port.
- ◆ **Montego Wavetable** - This setting sends MIDI data to the Montego music synthesizer.

If you do not have an external synthesizer connected, select "Montego Wavetable."

WAVETABLE MODE

Wavetable mode sets the number of voices and as well as the quality level of those voices. These settings directly effect the amount of CPU utilization.

- ◆ **64 Voice, Pro Quality** – The wavetable engine is optimized for 64 voices and premium quality. This mode has the highest CPU utilization.
 - ◆ **64 Voice, Game Quality** – The wavetable engine is optimized for 64 voices with lower CPU utilization.
 - ◆ **32 Voice, Pro Quality** – The wavetable engine is optimized for 32 voices. CPU utilization in 32-voice mode is significantly less than that in 64-voice, game quality mode.
-

WAVETABLE EFFECTS

The Montego A3DXstream offers advanced global reverb and chorus effects. These controls allow fine tuning of the chorus and reverb effects.

- ◆ **Effects Checkbox** – You can disable the chorus and reverb effects with this checkbox. When disabled, no effect are heard even if a program or MIDI file requests them.
- ◆ **Reverb and Chorus Sliders** – These sliders increase the amount of chorus and reverb over the levels set by a program or MIDI file. A zero setting selects the same amount of chorus and reverb as set in a the program or MIDI file. Moving the sliders up increases the effects level until the effect reaches its maximum possible level. If a program or MIDI file sets the maximum possible reverb and chorus, the sliders have no effect. These settings can be changed while a song is playing.

A3D TAB

OUTPUT MODE

The Montego A3DXstream is capable of optimizing it's A3D Interactive positional audio technology for speakers or headphone output. This setting lets you select the target output. For optimum performance select between speaker or headphone output whenever you switch between speakers and headphones.

A3D SPLASH

By default, when an A3D enabled application starts up, the A3D logo displays and a audio signature plays. You can deactivate the audio signature and A3D logo at startup using these checkboxes. These setting have no effect on the actual A3D sound.

ABOUT A3D

Click on this button for more information on Aureal's A3D Technology.



DISABLE DIRECTSOUND HARDWARE ACCELERATOR

Some games using DirectSound do not check the hardware resources correctly. If no sound is audible, you can disable hardware acceleration of DirectSound with this checkbox. Applications will then use the generic, slower and lower-quality software DirectSound drivers supplied within DirectX 5.0.



Disabling DirectSound hardware acceleration disables all A3D functionality.

A3D DEMOS TAB

This tab offers quick access to the A3D demos. Double-click the icons in this window to launch an A3D demo program.

WINDOWS NT TBS MONTEGO CONTROL PANEL

MIDI TAB

WAVETABLE MODE

Wavetable mode sets the number of voices and as well as the quality level of those voices. These settings directly effect the amount of CPU utilization.

- ◆ **64 Voice, Pro Quality** – The wavetable engine is optimized for 64 voices and premium quality. This mode has the highest CPU utilization.
 - ◆ **64 Voice, Game Quality** – The wavetable engine is optimized for 64 voices with lower CPU utilization.
 - ◆ **32 Voice, Pro Quality** – The wavetable engine is optimized for 32 voices. CPU utilization in 32-voice mode is significantly less than that in 64-voice, game quality mode.
-

WAVETABLE EFFECTS

The Montego A3DXstream offers advanced global reverb and chorus effects. These controls allow fine tuning of the chorus and reverb effects.

- ◆ **Effects Checkbox** – You can disable the chorus and reverb effects with this checkbox. When disabled, no effect are heard even if a program or MIDI file requests them.
- ◆ **Reverb and Chorus Sliders** – These sliders increase the amount of chorus and reverb over the levels set by a program or MIDI file. A zero setting selects the same amount of chorus and reverb as set in a the program or MIDI file. Moving the sliders up increases the effects level until the effect reaches its maximum possible level. If a program or MIDI file sets the maximum possible reverb and chorus, the sliders have no effect. These settings can be changed while a song is playing.

WINDOWS 3.1 TBS MONTEGO CONTROL PANEL

MIDI TAB

WAVETABLE EFFECTS

The Montego A3DXstream offers advanced global reverb and chorus effects. These controls allow fine tuning of the chorus and reverb effects.

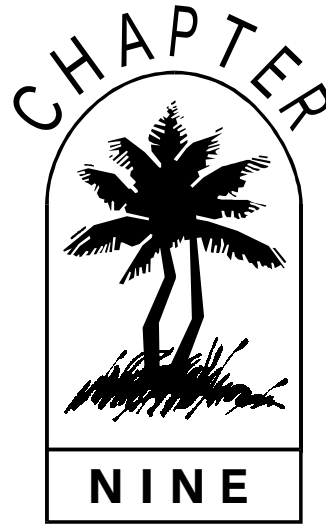
- ◆ **Effects Checkbox** – You can disable the chorus and reverb effects with this checkbox. When disabled, no effect are heard even if a program or MIDI file requests them.
- ◆ **Reverb and Chorus** – These set the amount of chorus and reverb over the levels set by a program or MIDI file. A zero setting selects the same amount of chorus and reverb as set in a the program or MIDI file. If a program or MIDI file sets the maximum possible reverb and chorus, the controls have no effect. These settings can be changed while a song is playing.



LEGACY TAB

The Legacy tab lets you configure your hardware settings for the Montego A3DXstream. Unless you are having a hardware conflict it is recommended that you use the default settings.





FOR ADDITIONAL INFORMATION

Now that you have the sound card, drivers and software applications installed, you are ready to start making music!

All of the software applications have online manuals in Adobe Acrobat PDF format. Using the Acrobat Reader, which you should have installed along with the software applications, you can view and print the manuals and easily search for information about the applications.

Both 16-bit and 32-bit versions of the Acrobat install can be found on the Turtle Beach Applications CD-ROM. If you chose not to install the Acrobat Reader during the Montego A3DXstream installation, locate the Acrobat directory on the CD and double-click SETUP.EXE. This will install the Acrobat Reader files necessary for viewing and printing the online manuals.



TECHNICAL SUPPORT

This **Getting Started Guide**, the **Testing and Troubleshooting** utilities and the various help and PDF files should be all you need to get the Montego sound card and the software applications working. However, if you need support, here is how to contact us — Monday through Friday, 9am-5pm, EST.

TO CONTACT TURTLE BEACH TECHNICAL SUPPORT:

Email: support@tbeach.com

Internet: www.tbeach.com

Phone: 914.966.2150

You can receive a list of frequently asked questions both through the web or by emailing support@tbeach.com.

IF YOU CALL:

- ◆ If possible, use a telephone near your computer.
 - ◆ The technician might need to ask about the type of system you are using and the additional hardware installed on the system — for example, a synthesizer, CD-ROM drive or MIDI interface. Try to have the manufacturers' manuals for these peripherals at hand.
 - ◆ Be prepared to explain the problems you are having, what you were doing when these problems occurred and any error messages you have received.
-



DIGITAL ORCHESTRATOR PRO DEMO

Included as one of the options on your Montego Applications CD install is a demo version of Digital Orchestrator Pro. This incredible program is the “big brother” to MIDI Orchestrator Plus (included) and adds the power of multitrack digital audio recording to the powerful MIDI recording and editing capabilities of MIDI Orchestrator.

With Digital Orchestrator you can add vocals, guitars, sax or any other real-world sounds to your compositions. For example, you can record drum, bass and keyboard parts as MIDI tracks. Record the lead vocals, background vocals and guitar parts as digital tracks. Then edit both of these audio formats together in the same environment. Arranging and editing is quick and easy with Digital Orchestrator’s drag-and-drop capabilities. In addition, the built-in Audio Mixdown feature lets you record an unlimited number of digital audio tracks.

Digital Orchestrator is also great for producing multimedia and video audio productions. Record a voice over narration on one track and a background music track from a CD on another. Edit for timing and volume



levels, then output a stereo WAV file to add to your production. Audio production doesn't get any simpler than this.

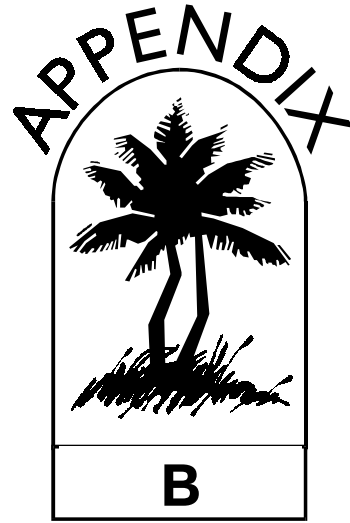
There are some great tools built in too, such as digital delay for echo and chorusing effects, a compressor/limiter, time compress/ expand and more. There are also many MIDI transforms such as humanize, move, and diatonic transposition, just to name a few. Digital Orchestrator has built in synchronization capabilities for synchronizing with external hardware such as a video deck or a multitrack recorder as well as many other pro features like: graphic controller editing, markers, and digital audio wave editing.

The demo is a full working version of Digital Orchestrator Pro. The Save feature has been disabled and the program will automatically close after 30 minutes, however, this is more than enough time for you to get a feel for the power of Digital Orchestrator Pro.

Since MIDI Orchestrator Plus is included with your sound card, you are entitled to upgrade to the full version of Digital Orchestrator for a discounted price.

THERE ARE SEVERAL WAYS TO UPGRADE:

- ◆ In the USA call 1-800-233-9377
Outside the USA, call 914-966-0600
 - ◆ Fax the included upgrade card
 - ◆ Mail the included upgrade card
-



WARRANTY AND LICENSING INFORMATION

This Appendix includes the warranty for the Montego A3DXstream sound card, the Voyetra End-User License Agreement for the software suite in this package and the FCC and EMC Declarations of Conformity.



HARDWARE WARRANTY

Voyetra Technologies Inc. ("Voyetra") warrants to the original end-user purchaser ("Purchaser") that the Turtle Beach Systems Montego A3DXstream ("Product") will be free of defects in materials and workmanship for a period of one (1) year from the date of purchase by Purchaser ("Warranty Period").

If a defect should occur during the Warranty Period, the Purchaser must obtain a Return Merchandise Authorization ("RMA") from Voyetra and be responsible for all costs incurred in returning the defective Product to and from an authorized Voyetra service center, or to the repair facility located at Voyetra's corporate headquarters. The Product must be returned in a static-proof bag, similar to the one included with the original packaging. A copy of the dated proof of purchase must be included with the defective Product and the RMA number must be clearly indicated on the outside of the package.

In the event of a defect, Purchaser's sole and exclusive remedy and Voyetra's sole liability is expressly limited to the correction of the defect by adjustment, repair, or replacement of the Product at Voyetra's sole option and expense.

This warranty does not cover, and Voyetra is not responsible for, damage caused by misuse, neglect, fire, acts of God, or unauthorized modification of the Product or damage resulting from the use of the Product with hardware or software programs not provided or specifically recommended by Voyetra.

Except as specifically provided herein, there are no other warranties, expressed or implied, including, but not limited to, any implied warranties or merchantability or fitness for a particular purpose and in no event shall Voyetra be liable for indirect, incidental, consequential, or other damages, including personal injury, lost profits and damages to property arising out of any breach of this warranty or otherwise.

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FCC DECLARATION OF CONFORMITY

PRODUCT NAME: Internal PCI Sound Card

Model Number: TBS-3355

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B

OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions. (1) This device may not cause harmful interference and (2) This device must accept any interference received including interference that may cause undesired operation.

INFORMATION TO USER:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.*
- 2. Increase the separation between the equipment and receiver.*
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- 4. Consult the dealer or an experienced radio TV technician for help.*

CAUTION: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

Turtle Beach Systems
5 Odell Plaza
Yonkers, NY 10701
Tel: (914) 966 0600
Fax: (914) 966 1102



DECLARATION OF CONFORMITY (EMC)

Manufacturers Name: Turtle Beach Systems
Manufacturers Address: 5 Odell Plaza
Yonkers, NY 10701

Declares that this product:

Product Name: Montego A3DXstream
Model Number(s): TBS3355
Year of Manufacture: 1998

Conforms to the following Product Specifications:

EMC: EN55022 (CISPR:1993) CLASS B
ENN50082-1 (1992):IEC801-2 (1981)
ENN50082-1 (1992):IEC801-3 (1984)
ENN50082-1 (1992):IEC801-4 (1988)

Supplemental Information:

The product herewith complies with the requirement to the EMC Directive 89/336/EEC.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standards(s).

Signature: _____ Date: _____

Printed Name: Frederick Romano Place: Yonkers, NY USA

Title: Executive Vice President

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TURTLE BEACH SYSTEMS

MONTEGO A3DXSTREAM CARD LAYOUT

